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Patent Application
Serial No. 08/808,315REMARKS

Claims 17 and 20 are amended; marked up versions of the amended claims are attached hereto pursuant to 37 C.F.R. § 1.121(c)(ii). Claims 17, 20 and 21 are pending in the application. Reexamination and reconsideration of the application, as amended, are respectfully requested.

Applicant believes the foregoing amendments comply with requirements of form and thus may be admitted under 37 C.F.R. § 1.116(a). Alternatively, if these amendments are deemed to touch the merits, admission is requested under 37 C.F.R. § 1.116(b). In this connection, these amendments were not earlier presented because they are in response to the matters pointed out for the first time in the Final Office Action.

Lastly, admission is requested under 37 C.F.R. § 1.116(a) as presenting rejected claims in better form for consideration on appeal.

The Examiner rejected Claim 17 under 35 U.S.C. § 102(b) as having been anticipated by Kato et al. (U.S. Patent No. 4,662,124). As amended, Claim 17 is directed to a tool comprising a sapphire monocrystal body having at least two faces defining a sharp edge, one face formed by a working plane and a second face formed by a cleavage plane parallel to a plane R of the sapphire monocrystal, the angle between the working plane and the cleavage plane being less than about 70 degrees. Applicant has amended Claim 17 to more specifically point out that the working plane and cleavage plane of claim 17 are structural limitations of the present invention.

Applicant believes that amended Claim 17 patentably distinguishes over Kato, et al. Kato et al. details a method of grinding sapphire wafers along their R plane to minimize warpage. The Office argues that Kato describes a sapphire body in which a sharp edge can inherently be formed by a working plane and a cleavage plane. (Outstanding Office action at p. 2). In order to establish

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inherency, the evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference. See, e.g. MPEP Section 2112. Applicant contends that the sapphire body of Kato et al. does not inherently possess the limitation that the sapphire crystal of Kato et al. does not necessarily possess "two faces defining a sharp edge, one face formed along a working plane and a second face formed along a cleavage parallel to a plane R of the sapphire monocrystal. . . the angle between the working plane and the cleavage plane being less than about 70 degrees" as required by amended Claim 17.

Regarding Figure 3 of Kato et al. to which the Examiner refers, that Figure shows a sapphire wafer with the C planes shown as diagonal lines 3. The C planes are the atomic net planes (0001) in the hexagonal crystal structure (Kato, Col. 2:17-20). Lines 3 are merely imaginary representations of these planes. The upper left hand edge of the sapphire wafer of the figure (where the imaginary plane is extended to demonstrate the 57.6° relationship) clearly has a right angle (90°) corner. The right hand edge of the wafer might appear to follow the C plane. Because the imaginary extension of the upper left edge shows an angle of 57.6°, simple geometry tells us that the upper right hand edge of the sapphire wafer must have an angle of 122.4° (i.e., 180° minus 57.6°). As such, the requirement of amended claim 17 that the sapphire body be comprised of "two faces defining a sharp edge, one face formed along a working plane and a second face formed along a cleavage parallel to a plane R of the sapphire monocrystal. . . the angle between the working plane and the cleavage plane being less than about 70 degrees" is not necessarily present in the sapphire wafer of Kato et al. As such, Kato et al. cannot anticipate the claimed invention. Applicants believes that the presently claimed invention patentably distinguishes over Kato et al. and amended Claim 17 should be allowed.

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Claim 20 stands rejected over Setsune JP59242918. Applicant respectfully traverses the rejection as to amended Claim 20. Amended Claim 20 is limited to sapphire monocrystal plate having "a microcrack on the major surface parallel to the plane R for starting to cleave the plate". Setsune neither teaches or suggests a microcrack limitation of amended claim 20. As such, Applicant believes that Amended Claim 20 patentably distinguishes over the cited prior art. Allowance of amended Claim 20 is respectfully requested.

In view of the foregoing, it is respectfully submitted that the application is in condition for allowance. Reexamination and reconsideration of the application, as amended, are requested. If for any reason the Examiner still finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at the Los Angeles telephone number (213) 337-6700 to discuss the steps necessary for placing the application in condition for allowance.

You are hereby authorized to charge any fees due and refund any surplus fees to our Deposit Account No. 50-1314.

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Respectfully submitted,

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17. (Twice Amended) A tool comprising a sapphire monocrystal body having at least two faces defining a sharp edge, one face formed by a working plane and a second face formed by a cleavage plane parallel to a plane R of the sapphire monocrystal, the angle between the working plane and the cleavage plane being less than about 70 degrees.

20. (Amended) A sapphire monocrystal plate having a major face[and], a working reference plane on a peripheral edge of the plate, the working reference plane being substantially parallel or perpendicular to a plane R of the sapphire monocrystal, [the working reference plane being used as a mark to form on the major surface] and a microcrack line on the major surface parallel to the plane R for starting to cleave the plate.